

Appl. No.: 09/891,197
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Amendments to the Drawings:

The attached sheet of drawings includes new FIG. 9, which was added in order to respond to the objection raised in the Office Action, as explained in the following Remarks.

REMARKS/ARGUMENTS

The Examiner has withdrawn the previous objections to Figures 5 and 6, but now objects to the drawings under 37 C.F.R. § 1.83(a) for failing to show every claimed feature. In addition, the Examiner rejects Claims 1-22 under 35 U.S.C. § 112, first and second paragraphs, and raises several other “problems” with the claims. The Examiner continues to reject Claims 1-4, 6-13, 15, 16, and 18-22 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,496,568 to Nelson. Moreover, the Examiner rejects Claims 1-13, 15, 16, and 18-22 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,633,910 to Rajan et al. The Official Action also rejects Claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Nelson or Rajan in view of U.S. Patent No. 6,246,320 to Monroe.

Applicants have amended independent Claims 1, 2, 9, and 10 for clarification and to more patentably distinguish the cited references, as will be explained in further detail below. Claims 15, 18, 21, and 22 have been amended for clarification. Therefore, Applicants submit that the pending claims are in condition for immediate allowance.

A. Objection to the Drawings

In the Office Action, the Examiner objects to the drawings under 37 C.F.R. § 1.83(a) for failing to show every claimed feature. In particular, the Examiner finds that “the method of notifying entities of events steps claims 1 or 2 (a)-(e); (for example); must be shown on a flow chart or the feature(s) canceled from the claims(s).” Although Applicants disagree with the objection given that current FIG. 3 provides an adequate illustration of the claimed invention, Applicants submit new FIG. 9 in order to overcome the objection. FIG. 9 is a flowchart generally describing the steps involved in providing notification of events or travel-related events in an integrated event notification system, as recited by independent method Claims 1 and 2. No new matter is added by new FIG. 9 since each element of the flowchart was described at least in FIG. 3 and paragraphs 11, 12, 26, 40, and 44-47 of the application as originally filed.

B. Specification

In paragraph 3 of the Office Action, the Examiner indicates that the disclosure is objected to because the examples shown in the specification are not shown in FIGS. 5 and 6. Applicants refer to the arguments presented in the previous response regarding the objection for failing to illustrate particular examples in the specification. In particular, one of ordinary skill in the art would not require illustrations of the examples to understand the invention. Moreover, Applicants submit that requiring an illustration of simple examples discussed in the specification is unnecessary to understand the invention and oversimplifies the figures.

C. The Rejections under 35 U.S.C. § 112, First and Second Paragraphs, are Overcome

Paragraph 5 of the Office Action rejects Claims 1-22 (Applicants note that Claims 14 and 17 were previously canceled) for failing to comply with the enablement requirement. In particular, the Examiner finds that “[t]he Applicant has laid out very broad definitions for the terms “entity” and “event” but has failed to define “response.” Moreover, the Examiner believes that the “multitude of responses that may be possible to that of an event occurring is limitless and for examiner to figure out all of the possibilities of responses would be undue.” Applicants initially submit that the test for determining whether the claims are enabled is whether one skilled in the art would be able to practice the claimed invention without undue experimentation (see MPEP §2164.01). It is irrelevant whether the Examiner considers that there may be a “multitude of responses that may be possible,” as “[t]he examiner should never make the determination based on personal opinion” (MPEP §2164.05). In any event, the specification provides examples of responses that would have enabled one of ordinary skill in the art to practice the claimed invention without undue experimentation. For example, paragraphs 10 and 46 of the present application provide exemplary responses.

The Examiner also rejects Claims 1-22 as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. The Examiner believes that the claims have two interpretations, “[o]ne that upon detection of a first event there is a response that triggers a second event and also there is a notification sent to a first

entity,” or “that a ‘response’ is the exact same as a ‘notification.’” Applicants submit that the amendment to independent Claim 1 addresses this rejection and clarifies that a response is not the same as a notification.

With reference to paragraph 7 of the Office Action, the Examiner raises other “problems” with the claims. In this regard, the Examiner finds that the recitation “initiating the first response to the occurrence of the first event” of Claim 1 fails to further limit the claim because the first response was already initiated where the response triggered a second event. Applicants submit that this rejection is now moot in light of the amendment to Claims 1.

The Examiner also believes that the recitation “determining whether the first entity has previously subscribed” fails to further limit Claim 1. Again, Applicants submit that the amendment to independent Claim 1 clarifies the claims such that the rejection is now moot.

Furthermore, the Examiner rejects Claim 1 for allegedly failing to omit an essential step, “that of having a first entity subscribe to receive notification, without which the invention would not work at all.” Applicants respectfully disagree, as the Applicants have made no indication in the present application that subscribing to receive notification is an essential step (see MPEP §2172.01). In any event, amended Claim 1 now recites “determining if a first entity has previously subscribed to receive notification of a first type of events that includes the first event,” and transmitting notification to the first entity of the first event in response to such a determination. Similarly, Claim 1 recites that “the second entity having previously subscribed to receive notification of a second type of events comprising the second event.” Not only do the Applicants disagree that subscribing to receive notification is an essential step, but the claim already recites that the first and second entities have previously subscribed to receive notification of the first and second events, respectively.

The Examiner rejects Claims 1 and 11 for purportedly lacking antecedent basis for the use of “the heterogeneous system.” Applicants refer the Examiner to the preamble of Claim 1 which recites “a plurality of heterogeneous systems, each entity associated with a different one of the heterogeneous systems.” Thus, antecedent basis is provided for “the heterogeneous system” in the body of Claims 1 and 11.

Further still, the Examiner believes that Claim 10 is omitting an essential structure for performing the claimed invention. In particular, the Examiner finds that “Applicants shows a system with a memory and processor but failes [sic] to claim a detection system and GUI’s to where notifications are sent and certainly other components are missing.” Applicants request clarification as to this rejection, as the present application nowhere discloses a “detection system,” let alone indicates that such a system is an essential structure. The specification of the present application clearly indicates that a data processing system is fully capable of performing the claimed invention (see ¶¶34-36). Similarly, Applicants have in no way disclosed that a GUI is essential and request that the Examiner clarify as to where Applicants have indicated otherwise.

In addition, the Examiner is unclear whether “a memory having program instructions” recited in Claim 10 is the same as the memory that is monitored for the occurrence of a travel-related event by the processor. Applicants submit that the memory containing the program instructions may or may not be monitored by the processor and refer the Examiner to paragraph 36 of the present application which clearly allows for such a possibility.

The Examiner also requests clarification whether the “integrated notification system” in Claim 1 is the same as the “processing system” in Claim 10. Applicants fail to understand the relevance of this request but, in any event, submit that the data processing system of Claim 10 is not necessarily the same as the integrated notification system of Claim 1. As discussed above, the specification of the present application contemplates various computer systems, each of which may include different components.

Paragraph 8 of the Office Action indicates that Claims 21 and 22 are indefinite for “attempting to change the definition of event as found within the specification.” The Examiner contends that the recitation that the first type of events is information that describes the notification itself and not the actual event. Applicants have amended Claims 21 and 22 to delete “information” for clarification such that the rejection of Claims 21 and 22 is overcome. As such, Applicants submit that Claims 21 and 22, as well as the “jumbled assertions” (see ¶34 of the Office Action) set forth in the previous response, are now clear.

Therefore, Applicants submit that each of the rejections of Claims 1-22 under 35 U.S.C. §112, first and second paragraphs, are overcome.

D. The Rejections under 35 U.S.C. § 102(e) are Overcome

The Official Action rejects independent Claims 1, 2, 9, and 10 under 35 U.S.C. § 102(e) as being anticipated by Nelson (Applicants refer to the Amendment dated September 15, 2005 for a discussion of Nelson). Independent Claim 1 of the present application recites detecting a first event of a plurality of events, wherein detecting the first event includes monitoring information from a memory for the occurrence of an event and publishing the first event upon occurrence of the first event. Claim 1 further recites determining whether a first entity has previously subscribed to receive notification of a first type of events comprising the first event. Claim 1 also recites that the first entity initiates a first response to the occurrence of the first event, and that a second event results from the first response such that the first event triggers occurrence of the second event. Moreover, Claim 1 recites that the second entity has previously subscribed to receive notification of a second type of events comprising the second event and that the first type of events is different than the second type of events. Independent Claim 9 includes similar recitations in the context of a computer-readable medium, while independent Claims 2 and 10 also include similar recitations in the context of a method and data processing system, respectively, for notifying entities of travel-related events.

In paragraph 11 of the Office Action, the Examiner rejects independent Claims 1, 2, 9, and 10 over Nelson and finds that Nelson allegedly discloses that the occurrence of a first event triggers occurrence of at least a second event resulting from a first response to the occurrence of the first event and relies upon column 2, lines 1-10 of Nelson, “wherein the second event may be receiving a customer response.” The Examiner also indicates in paragraph 33 of the Office Action that “when a flight is cancelled a passenger would be notified of such (first event), then the same passenger would get a notification of a gate change (second event).” In addition, the Examiner relies on column 3, lines 60-68 of Nelson as disclosing that a second entity subscribed to receive notification of a second type of events could “be another customer of a different flight that registered to be notified of its cancellation, delay, or event,” and that it is inherent that “if the

two entities were on different flights the type of events to be notified of would be different, such as flight 408 is cancelled and flight 409 is delayed.”

Applicants respectfully disagree, as the Examiner is clearly using hindsight to reject independent Claims 1, 2, 9, and 10 over Nelson. In this regard, independent Claim 1 not only recites that the first and second entities have previously subscribed to receive notification of first and second type of events, respectively, but also that the first entity initiates a first response to the occurrence of the first event, wherein a second event results from the first response such that the first event triggers occurrence of the second event. As such, even assuming that different passengers on different flights are first and second entities, the events are not otherwise related to one another and do not result from one another. In other words, a second event associated with a second passenger (i.e., flight 409 is delayed) would in no way result from a first event associated with a first passenger (i.e., flight 408 is cancelled), where the first and second passengers are on different flights. Thus, any response that is initiated as a result of flight 408 being cancelled would not trigger the occurrence of flight 409 being delayed. Clearly, the causal relationship required between the occurrence of the first and second events recited by the claimed invention is lacking in Nelson.

Furthermore, Claim 1 recites a first type of events and a second type of events that are different from one another. For example, dependent Claim 21 recites that the first type of events are those associated with a plurality of entities, while the second type of events are those associated with only a single entity. Moreover dependent Claim 15 recites that the first type of events includes events associated with a flight being delayed or a baggage claim changed for an entire flight, while the second type of events includes events associated with a person having been rebooked on a particular flight. Thus, Claim 1 recites that each of the first and second entities subscribe to different types of events, which is unlike Nelson where individuals are notified of the same type of event, that is, an event associated with individual passengers (see col. 2, lines 40-47 where customers are notified of a flight schedule event, a flight status event, a ticketing event, or marketing events). Applicants note that the Office Action contends that information regarding the cancellation, delay, or other event associated with two different flights constitute different types of events. When the type of event (i.e., changes to a flight for an

individual) is properly interpreted in light of the specification, however, such information amounts to the same type of event even if such event relates to different flights.

Moreover, in paragraph 11 of the Office Action, the Examiner first indicates that customers of different flights are different entities notified of different events. However, paragraph 33 of the Office Action contradicts this statement, where the Examiner finds that the same passenger would be notified of the first and second events. Claim 1 recites first and second entities, each of which subscribe to receive notification of events that are different from one another. Clearly, the same passenger cannot be both a first and a second entity, which contradicts the Examiner's conclusion that different passengers on different flights are different entities that are notified of different events, which further contradicts the Examiner's finding that the second event may be receiving a customer response. Applicants submit that this picking and choosing of alleged teachings of Nelson is further evidence of using hindsight to find that Nelson discloses the claimed invention.

In paragraph 10 of the Office Action, the Examiner indicates that dependent Claims 21 and 22 are rejected over Nelson. However, the Examiner does not specifically address these claims in any subsequent paragraphs. Therefore, Applicants request clarification as whether Claims 21 and 22 are rejected over Nelson and, if so, where Nelson discloses these claims.

The Examiner also relies on Rajan as disclosing independent Claims 1, 2, 9, and 10 of the present application. Rajan discloses a method and an apparatus for enabling real time monitoring and notification of data updates for web-based data synchronization services. In particular, Rajan discloses an Internet subscription system for alerting subscribers to changes in data maintained at Internet sites. A subscriber may specify a data condition to be monitored and a condition for notification. The system includes a gatherer that gathers changes from one or more Internet sites, and a guard that compares data changes with the condition for notification. In addition, the system includes a notification system for notifying subscribers of a change that meets the condition for notification.

The Examiner simply cites to column 14, lines 10-65 of Rajan, which allegedly discloses that "many events may be triggered all of which depend upon subscriber rules." In addition, the Examiner relies on column 14, lines 7-65, column 15, lines 1-65, and column 16, lines 1-65, as

purportedly disclosing a second entity that has subscribed to receive notification of a second type of events comprising the second event, wherein the first and second type of events are different.

Applicants disagree with the rejection, as Rajan also does not teach or suggest that a second event results from a response to a first event, that the first event triggers the occurrence of the second event, or that first and second entities subscribe to receive notification of first and second type of events, respectively, that are different from one another. Applicants again submit that the Examiner is improperly using hindsight to reject the claimed invention, which is evidenced by the fact that the Examiner generally recites to figures and portions of the specification without particularly pointing out any specific teaching or suggestion within Rajan that would teach every element of the claimed invention (see MPEP §2131). Namely, simply stating that “many events may be triggered” does not otherwise disclose that a first event triggers the occurrence of at least a second event or that the second event results from a first response to the occurrence of the first event, as recited by the claimed invention. In contrast, Rajan only discloses that users may be notified of changes in data maintained on an Internet site, and does not disclose that such data changes trigger at least a second event resulting from a response to the first event.

Likewise, Rajan does not teach or suggest that a second entity has subscribed to receive notification of a second type of events comprising the second event, wherein the first type of events is different than the second type of events. Rather, the data changes disclosed by Rajan are the same, as the notification events simply relate to changes in data occurring on Internet sites that relate to a particular user. Thus, Rajan does not teach or suggest first and second entities that have subscribed to receive notification of first and second type of events, respectively, where the first and second type of events are different, as recited by the claimed invention.

In paragraph 26 of the Office Action, the Examiner indicates that dependent Claims 3-8, 11-13, 15, 16, and 18-22 are rejected over Rajan. However, the Examiner does not specifically address these claims in any subsequent paragraphs. Therefore, Applicants request clarification as whether Claims 3-8, 11-13, 15, 16, and 18-22 are rejected over Rajan and, if so, where Rajan discloses the claims.

Although discussed above in conjunction with Claim 1, the other independent claims share similar recitations and, therefore, similar distinctions relative to the cited references. In particular, neither Nelson, Rajan, or any of the cited references, taken alone or in combination, teaches or suggests that the occurrence of a first event triggers the occurrence of at least a second event, that the second event results from a response to the first event, or that first and second entities subscribe to receive notification of first and second type of events, respectively, that are different from one another, as recited by independent Claims 1, 2, 9, and 10. As such, the rejection of Claims 1, 2, 9, and 10 under 35 U.S.C. §102(e) is overcome. Because the dependent claims include each of the recitations of a respective independent claim, Applicants submit that the dependent claims are allowable for at least those reasons discussed in conjunction with independent Claims 1, 2, 9, and 10.

E. Response to Arguments

In paragraph 31 of the Office Action, the Examiner believes that because Applicants failed to rebut Examiner's findings in the Advisory Action that Nelson and Monroe allegedly disclose publish/subscribe technology and that the technology was old and well known within the art, "that the Applicant concedes this issue, that publish/subscribe technology was well known within the art at the time of Applicant's filing date and the use of the technology in an event notification system would not make the invention patentably distinct." Applicants do not concede this issue and present further distinctions from the cited references in order to expedite prosecution of the present application. With respect to the reference relied upon by the Examiner as disclosing publish/subscribe technology, Applicants submit that even assuming that this technology was generally old and well known in the art, none of the cited references, including Nelson and Monroe, teaches or suggests using publish/subscribe technology for the application set forth by the claimed invention.

Furthermore, the Examiner goes on to state that in light of the problems to be solved set forth in the present application (e.g., "a need for a method that automatically and conveniently notifies an entity of a change in travel information when such a change occurs"), the Examiner alleges to have "clearly show[n] this need was filled and exact same method/system was well known. Through Nelson/Monroe and/or Rajan standing alone or obvious modification thereto."

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Applicants fail to understand the relevance of this statement in light of the pending claims. Even assuming that a broad problem to be solved that is set forth in the present application is also solved in Nelson, Monroe, and/or Rajan, there are many different patentable ways to solve a particular problem, which is evidenced by the fact that Nelson, Monroe, and/or Rajan do not disclose the claimed invention.

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CONCLUSION

In view of the amendments and remarks presented above, it is respectfully submitted that all of the present claims of the present application are in condition for immediate allowance. It is therefore respectfully requested that a Notice of Allowance be issued. The Examiner is encouraged to contact Applicants' undersigned attorney to resolve any remaining issues in order to expedite examination of the present application.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



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